We Claim AS OUR INVENTION

~~Patent Claims~~

1. A CT device having a radiation source (2) which, in order to scan an object (1) to be examined, can be displaced about a system axis (9) and emits a beam (4) of radiation, which strikes a detector system (5) comprising an array of a plurality of lines (6) and a plurality of columns (7, 7') of detector elements (8), the measured values obtained in this way being associated with one of a large number of projection angles and being supplied to a computer (11), which uses them to calculate images of the object (1) to be examined, signals generated in the detector elements (8) by radiation being supplied to electronic elements (13) to be read and amplified, the number of detector elements (8) of the detector system (5) exceeding the number of electronic elements (13), and it being possible for a region detector columns (7) comprising at least one detector column (7) to be connected to a larger number of electronic elements (13) in order to read out the detector elements (8) from this region than a different region comprising the same number of detector columns (7).

2. The CT device with a detector system (5) as claimed in claim 1, in which detector elements (8) of a region comprising at least one detector column (7) are not connected to electronic elements (13).

3. The CT device with a detector system (5) as claimed in claim 1 or 2, in which missing measured values from the region (II, II') with a reduced number of associated electronic elements (13) can be determined by interpolation of the measured values obtained from this region (II, II') and/or extrapolation of the measured values from the region (I) with an increased number of associated electronic elements (13).

4. The CT device with a detector system (5) as claimed in one or more of claims 1 to 3, in which a mounting device for the object (1) to be examined and the radiation source (2) can be adjusted relative to each other in the direction of the system axis (9), and the measured values obtained are associated with a z-position on the system axis (9).

5. The CT device with a detector system (5) as claimed in one or more of claims 1 to 4, in which charges produced in the detector elements (8) by absorption of radiation are supplied to electronic elements (13) to be read and amplified.

6. The CT device with a detector system (5) as claimed in one or more of claims 1 to 5, in which, at least in two detector lines (6), the length of the detector elements (8) is different in the direction of the system axis (9).

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